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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,681	04/14/2004	Mitsuharu Saikawa	5905.0111-01	4897

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EXAMINER	
DEODHAR, OMKAR A	

ART UNIT	PAPER NUMBER
3714	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/823,681	SAIKAWA ET AL.	
	Examiner	Art Unit	
	OMKAR A. DEODHAR	3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *9,17,20 and 28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *9, 17, 20 and 28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Final Rejection

Response to Arguments & Amendment

Applicant's arguments have been considered but are not persuasive.

Applicant essentially argues that while Yasui teaches determining whether an overlapping polygon should be displayed, Yasui does not teach modeling gradation polygons to overlap corresponding shadow models or that the shadow models are arranged above corresponding gradation polygons.

Examiner respectfully disagrees. As pointed out with the respect to Claim 9 in the instant Office action, it is inherent for the image processing to operate in the claimed manner because an opaque image is intended to not be seen through by a person viewing the screen. For example, if a particular image is of a baseball bat making contact with a baseball, the viewer would see part of the bat, with the ball directly in front of it. The viewer would not see through the opaque baseball. In this manner, the claimed sequence must be followed in order to render images on a display. Depending on the type of image displayed, the placement of shadow models follows.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 9, 17, 20 & 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Yasui et al. (US 6,320,580).

Claim 9:

Yasui teaches:

An image processing device comprising:

a processor for:

displaying a character model; and

displaying a polygon model a plurality of light source models illuminating the character model to create a plurality of shadow models;

(Figure 1 teaches the image processor. In Col. 1. Lines 20-25, Yasui discloses that image processing apparatuses generate polygons which from displayable objects on a screen.)

displaying a plurality of gradation polygons that overlap with a portion of corresponding ones of the plurality of shadow models;

(Figure 28 shows portions of polygons overlapping with shadowed regions).

setting transparency values for the plurality of shadow models;

(In generating polygons, parameters such as alpha values represent the degree of transparency and color related data. Also refer to Figure 3, showing Polygon Data including location, texture, color and alpha value.)

determining a first area of overlap of two or more of the plurality of gradation polygons, wherein the first area of overlap does not overlap the plurality of shadow models;

determining a second area of overlap of two or more of the plurality of gradation polygons and at least one of the plurality of shadow models; and

displaying the second area of overlap in a darker color than the first area of overlap. (A plurality of overlapping polygons is used to generate an image. As acknowledged by Applicant, Col. 13. Lines 5-17 discloses determining whether or not an overlapping polygon should be displayed, (Remarks Page 2). It is inherent for the image processing to operate in the claimed manner because an opaque image is intended to not be seen through by a person viewing the screen. For example, if a particular image is of a baseball bat making contact with a baseball, the viewer would see part of the bat, with the ball directly in front of it. The viewer would not see through the opaque baseball. In this manner, the claimed sequence must be followed in order to render images on a display.)

Claim 17:

Yasui teaches:

An image processing device for performing an image processing movement which generates a shadow of a motion character moving on a display screen, when lights are irradiated onto the motion character by a plurality of light sources, (Col. 2. Lines 22-29 teaches shadow processing),comprising:

a shadow model modeling means for modeling a plurality of shadow models each having color information and a transparency of 100% designated corresponding to each of the plurality of light sources, (Col. 3. Lines 34-42 teach varying transparency, this may range from 0% to 100%);

a gradation polygon modeling means for modeling a plurality of gradation polygons, each of the plurality of gradation polygons being modeled to overlap with corresponding, ones of the plurality of shadow models, each of the plurality of shadow models being arranged above the corresponding ones of the plurality of gradation polygons, and each of the plurality of gradation polygons being set with a transparency of the corresponding ones of the plurality of shadow models, (Refer to the discussion with respect to claim 9 - the claimed sequence must inherently be followed in order to display images on the screen).

a filter polygon modeling means for modeling a plurality of filter polygons for cutting off the transparency set to corresponding ones of the plurality of gradation polygons, each of the plurality of filter polygons overlapping a plurality of units of the plurality of shadow models and the plurality of gradation polygons, the plurality of filter polygons having no designated color information and a designated transparency of 0 %, (Col. 4. Lines 52-57 teach displaying shadow areas on the polygons to be drawn and the efficient blending of overlapping polygons. Also, the transparency levels are variable.)

; and

a pixel generation means that generates pixels to represent the shadow of the motion character based on the plurality of units of the plurality of shadow models and the plurality of gradation polygons, (Note that Yasui is directed towards image processing and thereby teaches limitations of pixel generation.)

Claim 20:

Yasui teaches:

A method for processing an image, comprising:

displaying providing a character model;

displaying a plurality of light source models illuminating the character model to create a plurality of shadow models;

displaying a plurality of gradation polygons that overlap with a portion of corresponding ones of the plurality of shadow models;

setting transparency values for the plurality of shadow models;

determining a first area of overlap of two or more of the plurality of gradation polygons, wherein the first area of overlap does not overlap the plurality of shadow models;

determining a second area of overlap of two or more of the plurality of gradation polygons and at least one of the plurality of shadow models; and

displaying the second area of overlap in a darker color than the first area of overlap.

(The claim limitations are taught as presented with respect to claims 9 & 17.)

Claim 28:

Yasui teaches:

A method for generating a shadow of a motion character moving on a display screen, comprising:

modeling a plurality of shadow models having color information and a transparency of 100% designated corresponding to each of a plurality of light sources that are irradiated onto the motion character;

modeling a plurality of gradation polygons, each of the plurality of gradation polygons being modeled to overlap with corresponding ones of the plurality of shadow models,

each of the plurality of shadow models being arranged above the corresponding ones of the plurality of gradation polygons, and each of the plurality of
gradation polygons being set with a transparency of the corresponding ones of the plurality of shadow models;
modeling a plurality of filter polygons for cutting off the transparency set to corresponding ones of the plurality of .gradation polygons, each of the plurality of filter polygons overlapping a plurality of units of the plurality of shadow models and the plurality of gradation polygons, the plurality of filter polygons having no designated color information and a designated transparency of 0 %; and
generating pixels to represent the shadow of the motion character based on the plurality of units of the plurality of shadow models and the plurality of gradation polygons, (The claim limitations are taught as presented with respect to claims 9 & 17.)

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omkar A. Deodhar whose telephone number is 571-272-1647. The examiner can normally be reached on M-F: 8AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on 571-272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/OAD/

/Corbett Coburn/
Primary Examiner
AU 3714